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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,864	01/14/2004	James Peter Branigan	AUS920030840US1	3392

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EXAMINER

CAO, DIEM K

ART UNIT PAPER NUMBER

2194

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/756,864

Applicant(s)

BRANIGAN ET AL.

Examiner

Diem K. Cao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-30 are presented for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 11-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 11-20 are directed to system claims. However, the bodies of the claims do not recite any physical article or object to meet the requirement of being a machine or manufacture claims. Even the claims recite "means for", however, in this instance application, "means for" are software modules.

The claims 21-30 are directed to a signal directly or indirectly by claiming a medium and the Specification recites evidence where the computer readable medium is define as a "*wave*" (such as a carrier wave), see specification, page 27, paragraph 96. In that event, the claims are directed to a form of energy which at present the office feels does not fall into a category of invention.

See MPEP 2106-2107

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible

harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-3, 11-13 and 21-23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 8, 10-11, 18, 19-20 and 28 of copending Application No. 10/756,865 in view of Pohlmann et al (U.S. 6,366,926 B1).

Both application 10/756,865 and this instant application are directed to a method and system for providing publish/subscribe functionality within a computer system, the method/system comprising generating subscriptions from subscription components, the subscription includes node ID and ID of the type of data, and expression that indicates particular criteria to be met for publication data to satisfy the request, publish data that includes the ID and data, and provide the published data to the subscription components when the criteria in the subscription is met. The only different between this instance application and the copending application is in this instance application, the publish data is modeling within a publication object, wherein the data is provided in a pre-established format consumable/recognizable by any one of the subscribe components. However, Pohlmann teaches the publish data is modeling

within a publication object, wherein the data is provided in a pre-established format consumable/recognizable by any one of the subscribe components (col. 3, lines 10-62). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Pohlmann to the system of current application because publish data in a format that can be used by multiple subscribers would eliminate the conversion step, thus, improve the performance of the system.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-4, 8-9, 11-14, 18-19, 21-24 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen (U.S. 5,881,315) in view of The Open Group (System Management: Event Management Service).**

As to claim 1, Cohen teaches in a modular computer system environment (distributed computing environment; col. 4, line 9), a method for enabling system-wide intercommunication among a plurality of publish and subscribe components coupled to nodes of a central information bus configuration (CIBC) (two or more nodes A, B and C connected through a communication

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link or network; col. 4, lines 10-12 Each of the processing systems may operate as a client or server, depending on whether it is requesting or supplying services; col. 4, lines 18-20), the method comprising:

- publication data (events are of several types, error message, warnings, etc; col. 5, lines 18-20), an identifier (ID) indicating a type of data (a unique universal identifier UUID; col. 6, lines 48-49), wherein the publication data is provided in a pre-established format consumable/recognizable by any one of the subscribe components (inherent from the event data is sent to interested consumers without modify or convert the data; col. 7, lines 21-24);
- receiving subscriptions from one or more of the subscribe components for the publication data (In order to start receiving events ... EMS 22; col. 6, lines 11-12 and event consumers ... create a particular "event filter group" for that consumer; col. 6, lines 36-39); and
- when the publication data is published on the central information bus (Once the event arrives at EMS via a remote procedure call; col. 7, lines 12-15), directing an issuance of the publication data to the one or more subscribe components via directed broadcast (a queuing ... to the interested consumers; col. 7, lines 21-24).

Cohen does not explicitly teach modeling the publication data within a publication object that includes the data and identifier. However, The Open Group teaches modeling the publication data within a publication object that includes the data and identifier (event consist of two objects, event header, the event identifier, event data; page 16, section 2.2.2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of The Open Group to the system of Cohen because The Open Group teaches a well designed Event Management Service giving timely warning of impending

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problems, automatically fixing problems before service levels are degraded, integrating application-specific events mechanisms so cross-application correlation can be done at a higher level (page 1, section 1.1), thus the performance of system of Cohen would increase.

As to claim 2, Cohen teaches the request includes the ID of the type of data (a unique universal identifier UUID; col. 6, lines 48-49 and event consumers ... create a particular "event filter group" for that consumer; col. 6, lines 36-39). The Open Group teaches

- modeling the subscriptions as subscription object that includes a request for the particular type of data (ems_filtername_list_t; page 84, and event filter, ems_event_type_t type; page 50) and a node ID for the node at which the subscription object is generated (ems_netname_t * hostname; page 84); and

- wherein the subscription is received from the node indicated by the node ID and the publication data is issued to the node (ems_pull_consumer_register (); page 84).

As to claim 3, Cohen as modified teaches

- registering the request for the data in a registration facility of the CIBC (event consumer must first register with EMS 22, Consumer Database, Event filter Database; col. 6, lines 7-12);

- comparing the ID for each publication object against the request ID in the registration facility (EMS 22 the ... Consumer Database; col. 7, lines 14-34); and

- signaling a match of the IDs and identifying a node for which the publication data is to be sent (A test is then ... event consumer; col. 7, lines 41-46).

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As to claim 4, Cohen as modified teaches

- placing the publication object in a queue prior to issuing the publication data to the one or more subscribing component (When the queue element is enqueued onto one of the consumer queues 70 ... sent it to the associated consumer queue 71; col. 10, lines 16-21); and

- issuing the publication data from the queue when the publication object reaches a top of the queue (pops elements off the elements off the consumer queue 72, and calls an event handler routine to retrieve the queue; col. 10, lines 35-39) .

As to claim 8, Cohen as modified teaches wherein the request within the subscription object further comprises an expression delimiter that indicates particular criteria to be met for a publication data to satisfy the request (an event filter group ... event type; col. 6, lines 59-64).

As to claim 9, Cohen as modified teaches the CIBC is an information kit and the publication object and subscription objects are information kit objects (Event Management Service; col. 5, lines 29-30). Also see The Open Group pages 15-16.

As to system claim 11, it is the same as the method claim of claim 1 and is rejected under the same ground of rejection.

As to claims 12-14 and 18-19, see rejections of claims 2-4 and 8-9 above.

As to computer product claim 21, it is the same as the method claim of claim 1 and is

rejected under the same ground of rejection.

As to claims 21-24 and 28-29, see rejections of claims 2-4 and 8-9 above.

7. Claims 5, 15 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen (U.S. 5,881,315) in view of The Open Group (System Management: Event Management Service) further in view of Bracho et al. (U.S. 6,021,443).

As to claim 5, Cohen teaches wherein the publication object further comprises a priority value (the priority of the event; page 16, section 2.2.2).

Cohen as modified does not explicitly teach the placing step further comprising arranging each publication object within the queue according to the priority value of each publication object, when two objects contain a same priority value, arranging the two objects according to a time on entry into the queue, whereby a first incoming object is placed ahead of a second incoming object within a queue, and issuing the publication data according to a sequential order of the publication object within the queue relative to other publication objects.

However, Bracho teaches the placing step further comprising arranging each publication object within the queue according to the priority value of each publication object, when two objects contain a same priority value, arranging the two objects according to a time on entry into the queue, whereby a first incoming object is placed ahead of a second incoming object within a queue, and issuing the publication data according to a sequential order of the publication object within the queue relative to other publication objects (this information can include the priority

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level of the published event; col. 5, lines 46-47 and events received by hub ...move through the system; col. 10, lines 29-43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Bracho to the system of Cohen and The Open Group because Bracho teaches the order of the events in a transaction processing can be maintained, which is important.

As to claims 15 and 25, see rejection of claim 5 above.

8. Claims 6-7, 16-17 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen (U.S. 5,881,315) in view of The Open Group (System Management: Event Management Service) further in view of Bracho et al. (U.S. 6,021,443) and Evans et al. (U.S. 7,191,180 B2).

As to claim 6, Cohen teaches wherein the publication object comprises a freshness level indicator (time-stamp information; col. 7, lines 9-10).

Cohen as modified does not explicitly teach determining prior to issuing the publication data whether the publication object is stale; and when a queued publication data is stale, triggering a publication of a current publication data from the publish component and discarding the queued publication data. However, Bracho teaches the event includes information regarding how long the events are valid (col. 5, lines 46-48), and when the event is expired, the event is not routed further by the hub (col. 15, lines 1-3). Evans teaches when the data is expired, an update

monitoring module will update the data in (col. 4, lines 29-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Bracho and Evans to the system of Cohen as modified by The Open Group because Bracho and Evans teach a method to provide to subscribe information that are up-to-date.

As to claim 7, Cohen teaches wherein the freshness level indicator is a timestamp (timestamp information; col. 7, lines 9-10).

Cohen as modified does not teach the publication object further comprises a function that enables the determining and triggering steps to be completed. Bracho teaches determining whether the event is expired (col. 15, lines 1-3), and Evans teaches triggering step to update the data when the data is staled (col. 4, lines 29-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply and modify the teaching of Bracho and Evans to the system of Cohen as modified by The Open Group because Bracho and Evans teach a method to provide to subscribe information that are up-to-date, thus include the features in the publication object itself would improve the performance of the system by automatically update the events that are staled, without checking all the events data.

As to claims 16-17 and 26-27, see rejections of claims 6-7 above.

9. Claims 10, 20 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Cohen (U.S. 5,881,315) in view of The Open Group (System Management: Event Management Service) further in view of Feridun et al. (U.S. 6,336,139 B1).

As to claim 10, Cohen as modified does not teaches wherein at least one of the subscribe component and the publish component is an agent that completes a secondary function upon receipt of the publication data. However, Feridun teaches the subscription component is an agent (each software agent can register a correlation rule for a given event which cause the software agent to run when the event is received; col. 8, lines 25-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Feridun to the system of Cohen because Feridun teaches software components that may be statically or dynamically deployed into a distributed computing environment and then executed within a given execution context to examine and correlate one or more given event streams (col. 1; lines 59-67)

As to claims 20 and 30, see rejections of claim 10 above.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K. Cao whose telephone number is (571) 272-3760. The examiner can normally be reached on Monday - Friday, 7:30AM - 3:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC
April 10, 2007


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER